Remarks

The present amendment responds to the final Official Action dated July 13, 2005. The Official Action rejected claim 13 under 35 U.S.C. §112, second paragraph as being indefinite for purportedly failing to particularly point out and distinctly claim the subject matter of the invention. Claims 1, 5, 7, and 11-13 were rejected under 35 U.S.C. §102(b) based on Tanagawa et al. U.S. Patent No. 5,068,873 (Tanagawa). Claims 4, 6, 14, 15, and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tanagawa. The Official Action objected to claims 4 and 6 under 37 C.F.R. §1.75(c) as purportedly being of improper dependent form. Claims 2, 3, 8-10 and 16-19 were withdrawn from consideration. These grounds of rejection are addressed below.

Claims 2, 3, 7-10, and 16-19 have been cancelled without prejudice. Claims 1, 4-6, 11-13, and 15 have been amended to be more clear and distinct. In particular, claims 1 and 11-13 have been amended to clarify that the first, second, and third instructions programmed in the device's memory comprise common test code and system code commonly utilized in a plurality of electronic devices and unique system code to customize the particular electronic device. Claim 4 has been amended to clarify the antecedent basis of the term "memory." Claim 5 has been amended to correct a technical error.

Dependent claims 21-27 have been newly added. Claims 21 and 22 have been added to address the advantageous feature of programming the electronic device with consumer preference information customized to an individual consumer. Claim 23 further defines the step of "programming ... with the third portion" so that this third portion overwrites test code, thereby

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reducing the required memory. Claims 24 and 25 further define the third portion of code programmed into the electronic device. Claim 26 further defines the electronic device to be a cellular phone. Claim 27 has been added to address the Section 112 rejection as further discussed below. Claims 1, 4-6, 11-15, and 21-23 are presently pending.

Section 112, Second Paragraph Rejection

Claims 12 and 13 have been amended and claim 27 has been newly added to overcome this rejection. In particular, claim 12 has been amended to remove the limitation of first and second input devices. Claim 13 which depends from claim 12 has been amended to add a first input device to the subject matter of claim 12. Claim 27 adds first and second input devices to the subject matter of claim 12. The noted inconsistency has been addressed.

Rule 1.75(c) Objection to Claims 4 and 6

As an initial matter, the Official Action confuses the concept of a proper dependent claim, the basis upon which claims 4 and 6 are objected to, with the concept of patentability, the holding relied upon by the Official Action in support of the Rule 1.75(c) objection. The Official Action relies on Ex parte Pfeiffer, 135 USPQ 31 (1961) for the holding that to be entitled to patentable weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense. This holding applies to the concept of patentability and is inconsistent with an improper dependent claim rejection of Rule 1.75(c).

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Applicants respectfully disagree that claims 4 and 6 do not further limit the subject matter of independent claim 1 and that these claims are, thus, rendered improper. The relevant issue is whether a structural limitation in a method claim is proper. If the claim is proper, then a determination of patentability can be made. Ex parte Pfeiffer specifically addresses this issue when it cites Ex parte Kangas, 125 U.S.P.Q. 419, 421 and states that "The patent statute, 35 U.S.C. 100(b), impliedly permits recitations of structure in method claims. Manifestly, the mere inclusion of structure in a method claim does not of itself render the claims unstatutory or fatally defective." Thus, the structural limitations which further define the electronic's memory as flash memory as claimed in claim 4 and further define said third portion of code as user interface codes as claimed in claim 6 are proper. This objection should be withdrawn.

The Art Rejections

As addressed in greater detail below, Tanagawa does not support the Official Action's reading of it and the rejections based thereupon should be reconsidered and withdrawn. Further, the Applicant does not acquiesce in the analysis of Tanagawa made by the Official Action and respectfully traverses the Official Action's analysis underlying its rejections.

Claims 1, 5, 7, 11-13 were rejected under 35 U.S.C. §102(b) based on Tanagawa. Tanagawa addresses a dual mode microcomputer with a mode utilized for testing the microcomputer by executing a test program stored in memory locally on the microcomputer rather than memory external to the microcomputer in order to better simulate actual operating conditions. Tanagawa, col. 1, lines 56-60 and lines 63-65. To this end, Tanagawa discloses two

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read-only memories (ROMs) where one of the ROMs is programmable. Tanagawa, col. 2, lines

1-5 and Fig. 1. The non-programmable ROM is programmed during fabrication with an ordinary

application program. Tanagawa, col. 2, lines 52-55. When the microcomputer operates in a

special mode, the programmable ROM (PROM) is loaded with a test program and the loaded test

program is executed. Tanagawa, col. 5, line 62 – col. 6, line 14. Unlike the present invention,

Tanagawa does not address the problem of efficiently loading memory of a portable electronic

device during the manufacturing process or customizing a device as presently claimed.

Unlike Tanagawa, the present invention addresses several advantageous features not

addressed by Tanagawa. First, an electronic device is programmed with different portions of

code common to a plurality of portable electronic devices. The three portions of code include

common test code, common partial system code and additional unique system code to

complement the partial system code and customize the electronic device. Plural electronic

devices are programmed with the first two portions of common code which include test code and

partial system code, tested at a board level, and then particular electronic devices are

programmed with the unique final portion of code to customize them. By programming partial

system code before board level testing and programming the remaining system code after board

level testing as presently claimed in claim 1, the present invention advantageously reduces the

upload process time. Specification, page 9, lines 16-20. Claim 1, as presently amended, reads as

follows:

1. A method of programming an electronic device's memory with test
code and system code, the method comprising the steps of:

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> programming said electronic device memory with code common to a plurality of electronic devices, wherein a first portion of the common code comprises test code for use during board level testing of said electronic device, and wherein a second portion of the common code comprises partial system code for system level testing of said electronic device;

> executing said test code portion of the common code during board level testing of said electronic device to determine the condition of said electronic device ;

> programming said electronic device memory with a third portion of code if the electronic device passes board level testing, wherein said third portion of code includes system code to complement said second portion of common code and customize said electronic device; and

> executing said second and said third portions of code during system level testing of said electronic device. (emphasis added)

Furthermore, the claimed method of claim 21 addresses programming the memory of a particular electronic device with consumer preference information customized to an individual consumer. By performing this customization step as claimed, the set-up burden placed on the consumer is reduced.

Tanagawa does not disclose and does not make obvious "programming said electronic device memory with code common to a plurality of electronic devices, wherein a first portion of the common code comprises test code for use during board level testing of said electronic device, and wherein a second portion of the common code comprises partial system code for system level testing of said electronic device," as presently claimed in claim 1. Tanagawa does not disclose and does not make obvious "programming said electronic device memory with a third portion of code if the electronic device passes board level testing, wherein said third portion of code includes system code to complement said second portion of common code and customize

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said electronic device," after board level testing as presently claimed in claim 1. Tanagawa merely discloses programming a ROM with application program and a separate PROM with a test program without providing guidance of when these types or portions of these types of programs should be programmed in the microcomputer. Tanagawa's disclosure appears to program the test code after programming the application code in ROM since its presumed that application code resides in ROM whenever Tanagawa operates in the special mode. See, Tanagawa at col. 5, lines 55-60.

Tanagawa's disclosure of a mode control circuit for generating a signal to operate the microcomputer in different modes falls well short of the claimed approach of programming memory with the remaining system code after executing a board level test. Moreover, Tanagawa does not disclose and does not make obvious "programming said memory with consumer preference information customized to an individual consumer," as presently claimed in claim 21. Consequently, Tanagawa fails to meet the limitations as presently claimed in claims 1 and 21. See also claims 11 and 12.

The Official Action relies on Tanagawa at col. 2, line 56 – col. 3, line 5 for purportedly disclosing fourth instructions which included customized code for an individual user. Applicants respectfully disagree. At the cited portion of text, Tanagawa discloses that programs stored in mask ROM may include an ordinary application program of the type provided for the microcomputer. The cited portion of text also provides that the program may be for video tape recorder (VTR) control or for additional functions associated with VTR control. Tanagawa does

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not disclose "programming said memory with consumer preference information customized to an individual consumer," as presently claimed in claim 21.

Claims 4, 6, 14, 15, and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tanagawa. The Official Action takes official notice that flash memory is well known in the art and not invented by the applicants. Such official notice fails to cure the deficiencies of Tanagawa. Since claims 4, 6, 14, 15, and 20 depend from and contain all the limitations of claims 1, and 12, as presently amended, claims 4, 6, 14, 15, and 20 distinguish from the references in the same manner as claims 1 and 12. Applicants respectfully request that the Examiner submit art or a combination thereof which discloses flash memory as claimed in dependent claims 4, 14, and 20 in combination with the features of their corresponding independent claims.

The relied upon references fail to recognize and address the problem of efficiently programming a portable electronic device during manufacturing in the manner advantageously addressed by the present claims. The claims as presently amended are not taught, are not inherent, and are not obvious in light of the art relied upon.
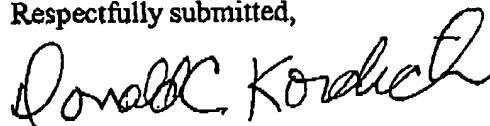
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Conclusion

All of the presently pending claims, as amended, appearing to define over the applied

references, withdrawal of the present rejection and prompt allowance are requested.

Date: January 11, 2006

Respectfully submitted,

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